Student Resource 2.6

Assignment Sheet:
Health Status Measurement Tables and Graphs

Student Name: Date:

Directions: Using Excel or the spreadsheet program your teacher provides, create the graphs described in this resource and write a summary describing each graph. Before you begin, read through all of the instructions and the assessment criteria to make sure you understand how your work will be assessed.

Column Graphs: Comparison of Life Expectancy in Different Regions of the World

Follow the steps listed below to create three column graphs showing the following:

* Comparison of life expectancy in the six different regions of the world
* Comparison of infant mortality rates in the six different regions of the world
* Comparison of under-5 mortality rates in the six different regions of the world

All of the data you need for these graphs is provided in the following table:

|  |
| --- |
| Health Measurement Data from 2005–2010 |
| **Africa** | **Asia** | **Europe** |
| Life expectancy at birth: 55.16 yearsInfant mortality rate: 79 (out of 1,000)Under-5 mortality rate: 125 (out of 1,000) | Life expectancy at birth: 68.98 yearsInfant mortality rate: 41 (out of 1,000)Under-5 mortality rate: 54 (out of 1,000) | Life expectancy at birth: 75.36 yearsInfant mortality rate: 7 (out of 1,000)Under-5 mortality rate: 9 (out of 1,000) |
| **Latin America and the Caribbean** | **Northern America** | **Oceania** |
| Life expectancy at birth: 73.41 yearsInfant mortality rate: 22 (out of 1,000)Under-5 mortality rate: 28 (out of 1,000) | Life expectancy at birth: 78.22 yearsInfant mortality rate: 7 (out of 1,000)Under-5 mortality rate: 8 (out of 1,000) | Life expectancy at birth: 76.65 yearsInfant mortality rate: 22 (out of 1,000)Under-5 mortality rate: 28 (out of 1,000) |

|  |  |
| --- | --- |
| Depending on your version of Excel, the procedure may vary slightly. If you run into difficulties, try using the Excel online help, get help from a classmate, or get help from your teacher.1. Open a new file in Excel and save it.
2. On the first worksheet, create the life expectancy graph. What data will you need on the X axis of your chart? Put a label for the data in the top row of a column, and then put the data in the rows below the label. Remember, the X axis is the horizontal axis, and the Y axis is the vertical axis. An example of the X and Y axes is shown in the image.
 |  |

1. What data will you need on the Y axis of your chart? Put a label for the data in the top row of a column, and then put the data in the rows below the label.
2. Select the data in both columns to tell Excel you want to display this data in a chart.
3. Click Insert, and select the type of chart you want to create in the Charts section of the ribbon. (For this exercise, select Column, since you want to create a column chart.)
4. Look at the chart that is created. Does it make sense? Does it present the information well? If not, try to figure out what went wrong, and create a new chart if necessary.
5. Click within the chart area to edit it. Use Chart Tools > Layout to add a title for your graph, add data labels, and label each axis.
6. Underneath (or next to) the graph, write a one or two sentence explanation of why the information in the graph is important.
7. Create new worksheets and repeat this process to create the infant mortality and under-5 mortality column graphs.

Line Graph: Progression of Heath Indicators Over Time

In the column graphs you created for this activity, you compared life expectancy by looking at statistics for different regions at the same point in time. Now you are going to create a line graph that shows how one health indicator, such as infant mortality or under-5 mortality, has increased or decreased over the past 50 years or so in a specific country.

Follow these steps to create your line graph:

1. Choose either the infant mortality rate or the under-5 mortality rate to research in more detail. You also need to choose a country to focus on for this part of the activity.

Circle the indicator you will graph:

infant mortality under-5 mortality

The country you will graph is:

1. Visit the following site: <http://esa.un.org/wpp/excel-Data/mortality.htm>. This site provides data from the United Nations’ Department of Economic and Social Affairs.
2. Select the report that covers your chosen health indicator (infant mortality and under-5 mortality are the first two lines of the table). The report will open in an Excel file, and you will see a lot of data. Scan the report to find the country you chose to focus on.
3. In the Excel file, you will see data from the last 60 years (1950 to 2010). Use all of the data you find for your country. Copy that data for your country into an Excel worksheet and use it to create a line graph, following the same steps you used to create your column graphs.
4. When you have finished the graph, write a summary of the information in your graph. Refer to Student Resource 2.4 for a checklist of what to include in your summary. Write your summary directly in your Excel file and place the text below your graph.

Make sure your assignment meets or exceeds the following assessment criteria:

* A column graph accurately and clearly compares life expectancy in six regions of the world. It is easy to compare and contrast life expectancy in the different regions.
* A column graph accurately and clearly compares infant mortality in six regions of the world. It is easy to compare and contrast infant mortality rates in the different regions.
* A column graph accurately and clearly compares under-5 mortality in six regions of the world. It is easy to compare and contrast the under-5 mortality rate in the different regions.
* For each column graph, a one- or two-sentence explanation demonstrates an understanding of the importance of health status indicators.
* In the line graph that tracks the progression of infant mortality or under-5 mortality, it is easy to identify the country, the mortality rate for each year, and whether the mortality rate is going up or down.
* A one-paragraph summary of the line graph concisely and accurately explains what information the graph conveys and why that information is important.
* The assignment is neat and uses proper spelling and grammar.